from paid databases of Slovak authority National Center for Health Information that collects the outputs of provided health care. The data were focused on totally or partly reimbursed medical devices from public health insurance funds. The selected group was medical devices for people with diabetes. The most recent data were from 1.1. 2009 - 31.12. 2013. It was used basic and advanced statistic processing by Microsoft Excel. **RESULTS:** Referring to the Center for Health Information, in the observed period, the share of MDO on total consumption of MD stagnated (MDO/MD2009=4.71%; MDO/MD2013=4.50%; ΔMDO/MD2009-2013=-0.21%). The total quantitative consumption MDO increased (Δ2009-2013=874 313pcs/22.22%; max2012=4 809 613pcs; min2009=3 935 300pcs; AVG=4 372 153pcs; Mean=4 429 095pcs; SD=346 405). The share of MDO on total reimbursementof MD stagnated (MDO/MD2009=8.31%; MDO/MD2013= 8.01%; ΔMDO/MD2009-2013=-0.30%). The total reimbursement in the observed period increased (Δ2009-2013=1 889 707€/17.73%; max2013=12 545 398€; min2010=10 383 600€; AVG=11 308 972€; Mean= 11 433 975€; SD=847 739). The share of MDO on the patient supplements of MD stagnated (MDO/MD2009=0.44%; MDO/MD2013=0.01%; ΔMDO/MD2009-2013=-0.43%). The total patient supplements decreased (Δ2009-2013=-13 335 €/-97.03%; max2009=13 743€; min2013=408€; AVG=4 571€; Mean=1 243€; SD=5 786). **CONCLUSIONS:** The ostomy medical devices and properly caring for ostomy can maintain a high quality of life for patients. Convenient reimbursement policy and almost none supplements for patients facilitates patient care of their own health.

PMD156

COSTS OF COMPRESSION THERAPY IN VENOUS LEG ULCERS IN GERMANY AND MODELLING OF THE ECONOMIC EFFECTS OF REGIONAL DISPARITIES IN HEALTH CARE

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OBJECTIVES: With a proportion of 57 to 80% leg ulcers are the most frequent chronic wounds next to decubitus and diabetic foot ulcers. Because of the high disease burden and the economic relevance, qualified and timely therapy is highly important. One of the constant aspects of causal therapy of venous leg ulcers is the medical compression therapy. Due to regional disparities in the treatment of venous leg ulcers, the question of economic effects arises. **METHODS:** A discrete event simulation model for conducting health economic evaluations in patients with chronic wounds from the perspective of German statutory health insurances has been developed. It contains different treatment and financing options. The effectiveness of compression therapy has been observed with available data from clinical studies. Cost data were implemented from a cross-sectional study. The proportion of patients with compression therapy is based on recent data of the Barmer GEK. **RESULTS:** The average costs for compression therapy are 230 € per patient and year. A pilot run of the model analyses indicates significant differences in costs between the regions, depending on the utilisation of compression therapy. The highest total costs of chronic wound treatment were generated in the federal states with the lowest prescription rates of compression therapy and the lowest costs in those states with the highest utilisation of compression treatment. **CONCLUSIONS:** An increased proportion of patients with compression therapy is associated with an increase in the healing rate and interrelated cost savings for the German health care system.

PMD157

THE USE OF REAL WORLD EVIDENCE TO SUPPORT MARKET ACCESS OF MEDICAL DEVICES – IMPLICATIONS FOR THE GERMAN SETTING

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OBJECTIVES: Upcoming changes in German healthcare regulation strengthen the need for real world evidence (RWE) analyses during market access of medical devices. RWE offers various opportunities to address different needs of diverse stakeholders of medical devices. Aim of this analysis was to identify the current status of RWE studies in the field of medical devices in Germany. **METHODS:** A PubMed based literature review was performed. All publications in German/English language describing the use of medical devices in a real world setting in Germany were included. Publications were stratified by study design, type of RWE data and type of research question. Data categories were claims data, registry data and other data sources. Research questions were distinguished between brand-specific and non-brand-specific assessments. **RESULTS:** In total, 39 publications were included in the analyses. Most of them used data from registries (44%), while claims data were analyzed in 18% of cases and other data sources were represented in 38%. The majority (74%) used a prospective study design. Two thirds of the studies analyzed data on a brand specific level whereas the remainder mainly distinguished between different types of medical devices. Registry data was mostly used to address brand specific research questions (88%) while all claims data based studies investigated research questions on a non-brand specific level. Common research questions were cost comparisons, survival analyses, and burden of disease. **CONCLUSIONS:** Various research questions can be answered by referring to RWE. Given the wide spectrum of medical devices, RWE is used only to a limited extent in the German setting, but is expected to become more important with changing regulation. However, careful considerations have to be made whether existing data sources can be utilized or new data needs to be generated to address specific research questions.

PMD158

ESTIMATION OF HEALTH BENEFITS ASSOCIATED TO EARLY DIAGNOSIS AND TREATMENT OF COPD

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OBJECTIVES: Estimation of health gains associated to early diagnosis and treatment of Chronic Obstructive Pulmonary Disease (COPD) in Portugal over a 20 year horizon. **METHODS:** A stochastic individually based dynamic microsimulation model was built generating the evolution of diagnosed and undiagnosed COPD prevalences and severity distribution over four stages. Exacerbation frequencies and quality of life were associated to severity stages. Smoking habits were taken into account since smoking is the main risk-factor of COPD and smoking cessation is the most effective strategy to slowdown disease progression. The model defines annual probabilities for individuals to develop COPD according to sex, age and smoking habits. Individuals with COPD progress depending on disease stage and smoking behavior. Intervention health benefits were estimated as the difference between the status quo and an intervention scenario. In the intervention scenario, smokers and ex-smokers aged 40 and over are screened in primary healthcare settings and selectively referred to smoking cessation programs. When diagnosed with COPD, patients progress more slowly and have higher quality of life due to medication and to less frequent exacerbation episodes. Health benefits of the intervention were estimated as the population life-years (LY) and quality-adjusted life-years (QALYs) difference between the scenarios. **RESULTS:** Over the 20 years more than 2.8 million individuals are screened. With discounting at 5%, the intervention resulted in gains of 33,230 LY for men and 16,990 LY for women while incremental QALYs were 91,586 and 25,983 respectively. Serious exacerbation events are 2.4% lower in the intervention scenario. **CONCLUSIONS:** These results show that early diagnosis and early treatment could lead to substantial health gains for the Portuguese population in a 20 year time horizon.

PMD159

NICE MEDICAL TECHNOLOGIES EVALUATION PROGRAMME – INFLUENCE OF THE REVIEW ON UPTAKE BY PROCUREMENT MANAGERS AND KEY STAKEHOLDERS

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OBJECTIVES: The Medical Technologies Evaluation Programme (MTEP) was set up by NICE in 2009 to identify new medical devices and diagnostics that could improve patient experience and outcomes whilst driving healthcare efficiencies. The purpose of this study was to examine whether procurement managers and key stakeholders reviewing medical technologies in England and markets beyond are aware of NICE's MTEP and whether they would use the review when considering uptake and use of a novel technology. **METHODS:** A systematic review was undertaken for published literature on MTEP. Both an online survey and telephone interviews were used with procurement managers and key stakeholders to elicit further insight into the relevance of an MTEP review and its impact beyond England. Findings were collated and analysed thematically. **RESULTS:** Procurement managers and key stakeholders reviewing medical technologies in England were aware of MTEP and used the outcomes from MTEP to assist in their decision making criteria. However, there are only a limited number of technologies that have gone through the programme and therefore its usefulness as a general resource is limited. Other markets often look for HTA having been performed on medical technologies and will broadly utilise data from MTEP where nothing has been performed in their local markets. Inconsistencies in healthcare costs are a major factor for not reviewing HTA from different markets. **CONCLUSIONS:** Procurement managers and key stakeholders reviewing medical technologies in England will use HTA, specifically NICE's MTEP, if this data is available for the product they are reviewing. Stakeholders in markets outside of England will use this data as part of their assessment for uptake, but will look to local guidelines as a first step. NICE's MTEP is viewed as a robust method for assessment of a technology; however, cost data is largely only applicable in England.

PMD160

MODELING OF RISKS AND BENEFITS OF LUNG CANCER SCREENING STRATEGIES USING LOW-DOSE HELICAL CT (LDCT) TECHNOLOGY IN CANADA

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OBJECTIVES: Lung cancer is the most common cause of death from cancer worldwide. Yet, screening for lung cancer remains controversial. We compared the risks and benefits of lung cancer screening with low-dose helical CT (LDCT) relative to chest x-ray (CXR). Concerns have been raised about recommending LDCT as a routine screening tool because of the potential harms, including cumulative radiation risks. **METHODS:** We developed a decision analytic model to compare LDCT and CXR under alternative screening scenarios, and estimate the number of radiation-induced cancers due to LDCT and CXR exposure. The age and sex specific model was calibrated for Canada, using National Lung Screening Trial (NLST) and Prostate, Lung, Colorectal and Ovarian trial (PLCO) data. Three alternative strategies were compared: regular screening with LDCT, screening with CXR, and no screening. **RESULTS:** We compared radiation risks to estimated cancers prevented, using age and gender- specific projections. The average effective radiation dose for LDCT is only 22% (1.4 mSv) of the standard chest CT (7 mSv). However, the effective dose might be 20% to 23% higher for females than males. The average effective dose for CXR ranges 0.01 mSv - 0.06 mSv. LDCT showed a 20% reduction in lung cancer mortality compared to CXR. This translated into 3 fewer deaths from lung cancer per 1000 high-risk individuals screened with LDCT. However, more than 90% of positive screened results were false positive findings. Over 97% of new lung cancer cases are in high-risk adults aged 50 years and older. **CONCLUSIONS:** Concerns have been raised about recommending LDCT as a routine screening tool for lung cancer. Our model addresses a number of public policy questions regarding who should be targeted for screening and what the trade-offs are in terms of potential harms and benefits.